The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 26

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Ex parte THOMAS L. MUELLER

Appeal No. 2000-0565 Application No. 08/539,840

ON BRIEF

Before McCANDLISH, <u>Senior Administrative Patent Judge</u>, ABRAMS, and JENNIFER D. BAHR, <u>Administrative Patent Judges</u>.

BAHR, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1-18, which are all of the claims pending in this application. Independent claims 1 and 11 have been amended subsequent to the final rejection (see Paper Nos. 10 and 11).

BACKGROUND

The appellant's invention relates to a bicycle seat gas spring adjustment system (claims 1-10) and a method for adjustment of a seat (claims 11-18). An understanding of the invention can be derived from a reading of exemplary claims 1 and 11, which appear in the appendix to the appellant's brief.

The sole prior art reference of record relied upon by the examiner in rejecting the appealed claims is:

Carroll 4,789,176 Dec. 6, 1988

The following rejections are before us for review.¹

- (1) Claims 1 and 11 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Carroll.
- (2) Claims 2-10 and 12-18 stand rejected under 35 U.S.C. § 103 as being unpatentable over Carroll.

Reference is made to the brief (Paper No. 14, filed July 7, 1997)² and the first Office action and answer (Paper Nos. 3 and 25) for the respective positions of the appellant and the examiner with regard to the merits of these rejections.

¹ According to the advisory action mailed March 7, 1997 (Paper No. 11), the new matter rejection under the first paragraph of 35 U.S.C. § 112 was overcome by the amendment in Paper No. 10.

² A duplicate copy of the appeal brief was also filed on September 24, 1998 (Paper No. 20).

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellant's specification and claims, to the applied prior art reference, and to the respective positions articulated by the appellant and the examiner. For the reasons which follow, we cannot sustain either of the examiner's rejections.

Before addressing the examiner's rejections based upon prior art, it is essential that the claimed subject matter be fully understood. Analysis of whether a claim is patentable over the prior art under 35 U.S.C. §§ 102 and 103 begins with a determination of the scope of the claim. The properly interpreted claim must then be compared with the prior art. Claim interpretation must begin with the language of the claim itself. See Smithkline Diagnostics, Inc. v. Helena Laboratories Corp., 859 F.2d 878, 882, 8 USPQ2d 1468, 1472 (Fed. Cir. 1988). Accordingly, we will initially direct our attention to independent claims 1 and 11 to derive an understanding of the scope and content thereof.

Claim 1, in reciting "[a] bicycle seat gas spring adjustment system inserted into a seat tube and operated in conjunction with a conventional seat post and a bottom bracket," with the first half of the gas spring "substantially bearing with said conventional seat post" and the second end of the gas spring "substantially bearing upon said bottom bracket," necessarily includes the seat tube, seat post and bottom bracket as part of the claimed invention.

Therefore, claim 1 is directed to the combination of a seat tube, seat post, bottom bracket and gas spring.

Each of claims 1 and 11 also requires a "gas spring," which we understand to be a term of art that refers to a self-contained hydra-pneumatic ram comprising a piston and cylinder unit, wherein the cylinder contains both a pressurized gas and hydraulic oil and the piston is provided with an orifice for passage of at least the hydraulic oil during movement of the piston. The passage of oil through the piston orifice of a gas spring helps allow the pressures on both sides of the piston to equalize and provides damping to thereby control the rate of movement of the piston and piston rod.³

The anticipation rejection

Carroll discloses an adjustable bicycle seat post assembly comprising a seat post 40 made of a round tube 44 having an inside cylindrical bore 46 with a closed upper end 48 and an air valve 52, a tubular seat mast 22 and a mounting shaft 42 having a lower head portion 66 secured to the seat mast and an upper head portion which forms a piston 62. A variable volume air chamber 72 is provided between the piston and the closed upper end 48 of the seat post. Further, the piston 62 is furnished with O-rings 70 to provide an air seal against the

³ In proceedings before it, the PTO applies to the verbiage of claims the broadest reasonable meaning of the words in their ordinary usage as they would be understood by one of ordinary skill in the art, taking into account whatever enlightenment by way of definitions or otherwise that may be afforded by the written description contained in the applicant's specification. In re Morris, 127 F.3d 1048, 1054, 44 USPQ2d 1023, 1027 (Fed. Cir. 1997). We emphasize that terms in a claim should be construed as those skilled in the art would construe them. See Specialty Composites v. Cabot Corp., 845 F.2d 981, 986, 6 USPQ2d 1601, 1604 (Fed. Cir. 1988) and In re Johnson, 558 F.2d 1008, 1016, 194 USPQ 187, 194 (CCPA 1977).

cylindrical bore 46. The air in the air chamber 72, which may be pressurized by a conventional bicycle pump via the valve 52, resists downward movement of the seat post and seat. A quick release clamp 30 is provided to selectively clamp the seat post to the seat mast or release the seat post for telescoping movement relative to the seat mast.

Anticipation is established only when a single prior art reference discloses, expressly or under the principles of inherency, each and every element of a claimed invention. RCA Corp. v. Applied Digital Data Sys., Inc., 730 F.2d 1440, 1444, 221 USPQ 385, 388 (Fed. Cir. 1984). In other words, there must be no difference between the claimed invention and the reference disclosure, as viewed by a person of ordinary skill in the field of the invention. Scripps Clinic & Research Found. v. Genentech Inc., 927 F.2d 1565, 1576, 18 USPQ2d 1001, 1010 (Fed. Cir. 1991). It is not necessary that the reference teach what the subject application teaches, but only that the claim read on something disclosed in the reference, i.e., that all of the limitations in the claim be found in or fully met by the reference. Kalman v. Kimberly Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984).

The appellant argues on pages 5-9 of the brief that Carroll does not anticipate claim 1 or claim 11 because the piston and cylinder arrangement formed by the seat post and mounting shaft is <u>not</u> a "gas spring" as called for in the claims, in that the air is trapped in the air chamber 72 on one side of the piston only and no hydraulic damping is provided in the Carroll

air cylinder. Consequently, Carroll does not provide the controlled and smooth movement inherent in a gas spring.

We agree with the appellant in this regard. While the adjustment assembly of Carroll does comprise a gas cylinder, the trapped air cylinder disclosed therein is not a "gas spring" as that term would have been understood by one of ordinary skill in the art for the reasons stated by the appellant.

Moreover, as Carroll's gas cylinder is formed by the seat post, it cannot reasonably be considered to be "operated in conjunction with a conventional seat post" or "substantially bearing with said conventional seat post" as required by claim 1. Likewise, Carroll lacks a step of "inserting said conventional seat post into said seat tube until said conventional seat post substantially bears upon said first half of said gas spring" as recited in claim 11.

In light of the foregoing, we cannot sustain the examiner's rejection of claims 1 and 11 as being anticipated by Carroll.

The obviousness rejection

The 35 U.S.C. § 103 rejection of claims 2-10 and 12-18 rests in part on the examiner's finding that Carroll discloses a gas spring disposed in bearing relationship with a conventional seat post. The above-discussed lack of support in Carroll for this finding fatally taints the examiner's conclusion that the differences between the subject matter recited in claims 2-10 and 12-18 and the assembly of

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Carroll are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art.

It follows then that we shall also not sustain the examiner's rejection of claims 2-10 and 12-18 as being unpatentable over Carroll.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1 and 11 under 35 U.S.C. § 102(b) and claims 2-10 and 12-18 under 35 U.S.C. § 103 is reversed.

REVERSED

HARRISON E. McCANDLISH Senior Administrative Patent Judge)))
NEAL E. ABRAMS Administrative Patent Judge))) BOARD OF PATENT) APPEALS) AND) INTERFERENCES))
JENNIFER D. BAHR Administrative Patent Judge)))

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Kevin L. Klug 11237 Concord Village Avenue St. Louis, MO 63123-6903 Appeal No. 2000-0565 Application No. 08/539,840